

# On the status of Isabelline *Lanius isabellinus*, Turkestan *L. phoenicuroides* and Red-backed Shrikes *L. collurio* in the Eastern Province of Saudi Arabia

by Brian S. Meadows

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**SUMMARY.**—Two races of Isabelline Shrike *Lanius isabellinus* have recently been given specific rank: *L. isabellinus* (Isabelline Shrike) and *L. phoenicuroides* (Turkestan Shrike). Both were formerly considered conspecific with Red-backed Shrike *L. collurio*. This note represents a preliminary analysis of their status at Jubail on the Persian Gulf, based on counts of the three species over a ten-year period. The data indicate that *L. isabellinus* is the main wintering species, being significantly attracted to recently landscaped areas; it is also an early-spring and late-autumn migrant. *L. phoenicuroides* is a later spring and an early-autumn migrant, while *L. collurio* is always most abundant in spring.

Three closely related species of shrikes, Isabelline *Lanius isabellinus*, Turkestan *L. phoenicuroides* and Red-backed Shrikes *L. collurio*, are all regular visitors to the Arabian Peninsula, either as passage migrants or winter residents. However, information on their seasonal occurrence, preferred wintering habitat, numbers and overlap in occurrence on migration is still only partially available. This is partly because all three were, until relatively recently, considered a single species and identification criteria for their separation—particularly for Isabelline Shrikes—is complex and has often been contentious. This note provides some additional information on their status in eastern Arabia—I follow Panov (2009) who argued the case for splitting Isabelline Shrike into two species (not three, *contra* Pearson 2000); these are *L. phoenicuroides*, which breeds in Central Asia and is considered monotypic, and all of the paler birds breeding in Mongolia and north-west China which are lumped together as *L. isabellinus*.

## Background

I was resident in Saudi Arabia during the period 1983–2004 inclusive. The first ten years on the Red Sea at a new industrial city, Yanbu al-Sinaiyah (23°56'N, 38°14'E), were followed by the same period in a similar city on the Persian Gulf at Jubail al-Sinaiyah (27°01'N, 49°40'E). Both sites have been described by the Royal Commission for Jubail and Yanbu (1987). At Yanbu, Baldwin & Meadows (1988) did not attempt to systematically record the two species of isabelline shrikes, which were then considered only as races. However, during the ten years I was resident at Jubail I took field notes on all shrikes encountered and the following is a preliminary analysis of some of my findings. *L. isabellinus* is the sole wintering species and a passage migrant in small numbers in both spring and autumn, *L. phoenicuroides* is a relatively abundant passage migrant at both seasons, and *L. collurio* is almost exclusively a spring passage migrant.

## Identification criteria, methods and wintering habitat

During each week I was resident in Jubail al-Sinaiyah I toured the city, which covers an area of c.920 km<sup>2</sup>, and searched for 'red-tailed' shrikes in suitable habitat, such as areas

of shrubs and trees with significant adjacent ground cover, and recorded where birds were present. Observations were made on a daily basis but of over 20 potential sites only a few could be visited every day, although all were inspected at least once per week. Approximately 10% of the city had been established by 1994, in line with a master plan, but much of the city outside of the industrial parks and settlement zone was still completely undeveloped. Natural habitat in the form of barchan sand dunes, some *Stipa* steppe along the western boundary and a mix of low coastal dunes and salt-pans in the east remained throughout my residency. Not one working palm oasis, which are known to attract overwintering shrikes elsewhere in the Eastern Province, however, remained within the city boundaries and much of the natural habitat was of little attraction to shrikes except during exceptional 'falls' of migrants.

Recently landscaped areas provided the majority (bar two) of the overwintering sites: a total of 15 man-made sites held shrikes in December–February and nine of these were occupied during three or more winters in 1994–2004. Optimal man-made habitat consisted of a mosaic of dense shrubs and small trees adjacent to irrigated grass lawns and flower beds with bare soil—mimicking natural shrike habitat. Such areas had been developed for coastal landscaping (there is now an 8-km corniche along the coast), small parks, mosque grounds plus gardens around offices within industrial parks and at a hotel. It was noticed that at one regular overwintering site, when an adjacent grass lawn was replaced with gravel, the shrikes left. Tall vegetation growing in and around land-treatment areas from septic tanks on temporary housing estates lacking main drainage were also used in successive years. Of two natural overwintering sites identified, one comprised vegetation surrounding a surface pool fed by late-autumn rains in the hollow of a large sand-dune, and the second *Tamarisk*-dominated scrub surrounding a groundwater-fed pool at the base of a coral outcrop on the coast. Some wintering birds always remained well hidden within bushes from where they pounced on their prey—unlike grey shrikes *L. meridionalis* / *L. pallidirostris*, which normally used exposed perches atop bushes as lookouts—and because of this behaviour it was easy to under-estimate the numbers of wintering *L. isabellinus* without repeat visits / long periods of observation. In addition, similar landscaped habitat in coastal Saudi Arabia between Jubail and Al-Khobar (26°17'N, 50°12'E) was also attractive to overwintering *L. isabellinus*, albeit with significant differences in numbers during different winters as at Jubail. Highest densities of wintering birds were often found in the garden on the Saudi Arabia–Bahrain causeway (e.g. at least ten on 25 December 2002).

As indicated above all the overwintering shrikes were considered to be *L. isabellinus*. Identification in the field, however, can be extremely difficult due to overlap in features, while published descriptions rarely take into account different perceptions of colour between observers. Ideally, all birds should be mist-netted for feather analysis, but this was impossible because of security concerns, especially as many were in public places. The best consistent features I found for separating adult *L. isabellinus* from *L. phoenicuroides* were the paler upperparts (including crown to lower back)—resulting in less contrast between the upper- and underparts, much less-contrasting facial features with an inconspicuous white supercilium and a relatively indistinct narrow dark eye-mask, normally confined to behind the eye, and a much duller red (considered cinnamon) rump and tail (the latter possibly shorter on many birds); all of the latter features combine to give an overall pallid appearance. Variation in the size of the white wing-patch was found to be of limited value for specific identification in the field. All obvious hybrids and birds that I could not assign to species (some of which were probably birds of the 'karelini' type) have been excluded from Table 1. It is possible, however, that a few individuals were misidentified, but this is unlikely to affect my general conclusions concerning wintering status and passage periods

of the two species at Jubail. No attempt to identify races of *L. isabellinus* was made, although most were probably of the nominate form. Separation of *L. collurio* from *L. isabellinus* and *L. phoenicuroides* was relatively straightforward using modern field guides. Optical aids were normally limited to 10× binoculars but on the Arabian Peninsula, compared to temperate latitudes, light conditions were usually excellent.

## Migration

Data on migration periods, for the purpose of this account, covers March–May and September–November (Table 1). Table 1 shows the total number of birds found at Jubail al-Sinaiyah; each month has been divided into early (1–15, inclusive) and later periods, plus the number of bird days. The data cover the autumn of 1994 to the end of spring in 2004 (with the exception—in 1998—of the second half of September and first 15 days of October). It is recognised that using these criteria for migration data, for early March and late November, in particular, there is likely to be some overlap between wintering individuals and migrants, especially for *L. isabellinus*, while in some years passage can even continue until early December (e.g. a ‘fall’ of five *L. isabellinus* in a reedswamp surrounded by desert on 6 December 2002—left by 9 December—in a year when there had been negligible passage earlier). March departure dates in different years also varied by up to 22 days, based on sightings of individually recognisable birds that were known to have overwintered in the city (these have been excluded from Table 1).

## Discussion

My observations show that *L. isabellinus* is the only species that overwinters, which conclusion was also made by Hirschfeld (1995) on Bahrain, albeit he had no data on the situation in Saudi Arabia at the time. However, this was also probably the case, in retrospect, of the three birds reported overwintering on the Red Sea coast (Baldwin & Meadows 1989). Migrants of this species arrive later and pass through earlier than *L. phoenicuroides*, with relatively few remaining into April and none apparently occurring until October (Table 1). *L. phoenicuroides* passes through mainly from the second half of March until early May and

TABLE 1

Occurrence of Isabelline *Lanius isabellinus*, Turkestan *L. phoenicuroides* and Red-backed Shrikes *L. collurio* at Jubail, Eastern Province, Saudi Arabia, with each month ‘divided’ into two halves.

	<i>L. isabellinus</i>		<i>L. phoenicuroides</i>		<i>L. collurio</i>	
	First	Second	First	Second	First	Second
March	49/49	27/34	16/8	83/43	0/0	0/0
April	10/9	0/0	56/35	89/57	0/0	341/99
May	0/0	0/0	35/26	3/3	653/99	142/47
September	0/0	0/0	52/38	113/49	0/0	2/2
October	4/4	40/32	48/29	28/19	0/0	0/0
November	27/29	34/34	19/10	4/3	0/0	0/0

TABLE 2

Occurrence of Red-backed Shrikes *Lanius collurio* at Yanbu (1984–92)

	Bird days	No. of birds
Spring (March–May)	6	6
Autumn (August–October)	113	262
Years recorded: spring 3/9, autumn 9/9.		

again from late August with a peak usually in September. In addition, mention can be made of two individuals seen in July (6–17 July 1994 and 17 July 2003) which were considered to be local breeders that had dispersed—the species breeds on the opposite side of the Persian Gulf (Porter *et al.* 1966) and has bred at least once in Arabia (Eriksen & Jennings 2006). *L. phoenicuroides* winters much further south than *L. isabellinus*, some individuals regularly reaching as far south as north-east Tanzania (Lefranc & Worfolk 1997). Britton (1980) stated that the species frequents dry woodland, bushland, scrub and cultivation from sea level to c.2,000 m; in central Kenya, where I lived prior to taking up residence in Saudi Arabia, I found that they often overwintered in verdant riverine habitat—far less arid than many natural habitats utilised by *L. isabellinus*, but apparently still in drier country than *L. collurio* wintering even further south in Africa.

*L. collurio* passes through Jubail mainly during the first two weeks of May with the vanguard from mid April; in 1996 there was a very heavy fall in late April. In some years, stragglers (usually) females are still passing through in June (latest 23 June 2004). The peak in May coincided with the appearance of large numbers of other spring migrants, especially Common Whitethroats *Sylvia communis*, which are frequently killed by shrikes. There were no July records. In autumn it is scarce, with only two records (both in September 2002) during ten years' residence in Eastern Province. This is in complete contrast to my experience at Yanbu al-Sinaiyah, where the species is rare in spring (Table 2). In spring most probably enter Arabia via the south-west of the peninsula in association with a rain belt, which is prevalent at this season, between the Gulf of Aden and along the Red Sea coast as far north as 20°N. It is, however, an annual migrant in autumn. The presumed earliest-returning bird at Yanbu was on 24 July 1992 (an immature that stayed until 10 August) but with maturing landscaped areas the possibility of occasional breeding within the city, as is already the case for some other Palearctic summer migrants at Yanbu, cannot be ruled out in the future. In spring, the results at Jubail, and its known scarcity along the northern Red Sea coast as a spring migrant, indicate that any individuals arriving on the Persian Gulf heading for Western Europe via the Levant would migrate almost due west after departing. A bird ringed in the Czech Republic in June was recovered the following May in the Eastern Province (Hirschfeld 1995). It is, however, not known what percentage of the birds seen at Jubail was heading for Western Europe or the Near East, *vis-à-vis* those migrating to Central Asia, as subspecific identification of *L. collurio* was not attempted.

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Address: 9 Old Hall Lane, Walton-on-the-Naze, Essex CO14 8LE, UK, e-mail: BrianSMeadows@lycos.com